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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,300	10/12/2005	Taketoshi Usui	01197.0254	1095
22852 7590 01/28/2008 FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			EXAMINER ARNBERG, MEGAN C	
			ART UNIT 1796	PAPER NUMBER
			MAIL DATE 01/28/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/532,300	Applicant(s) USUI ET AL.	
	Examiner Megan Arnberg	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5, 6 and 9-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 6 and 9-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities: On page 4 line 27-page 5 line 3, when teaching the order of the peaks for the ratio of the NMR spectrum, the order of the peaks given is 37-47 ppm to 47-57ppm. However, on page 34 lines 9-19 the order of the peaks for the ratio given is 47-57 ppm to 37-47 ppm, which is the reverse of the first mention for the NMR spectrum. These two instances are inconsistent with each other. Appropriate correction is required.

The objection to the abstract is withdrawn in view of the amended abstract.

Claim Objections

The claim objections to claims 4-15 over being in improper multiple dependent form is withdrawn in view of the amended claims.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 2 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not

Save for later
unless they amended the spec. in this area
ie. Allowance
to know it would be Non-Final.

described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The amendment to include the ratio is not higher than 7 is not supported. On page 34 lines 9-19, the ratio of the peaks in the NMR spectrum is the peak at 47-57 ppm to the peak at 37-47 ppm, which can have a range of 3 to 7. This is the opposite ratio order of the claimed ratio.

The claim rejections to claims 1-3 for the relative terminology, capsule membrane, and lack of units is withdrawn in view of the amended claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5-6, 9-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Ishimura et al. (EP 0304503).

Regarding claim 1: Ishimura et al. teaches a curing agent/hardener comprising: a core/powder of an amine compound that has at least one tertiary amino group, a reaction product of the amine compound and an epoxy resin as a capsule

membrane/shell, a group capable of absorbing infrared rays of wave length 1630 to 1680 cm^{-1} , and a group capable of absorbing infrared rays of wave length 1680 to 1725 cm^{-1} on the surface of the core/powder, thereby being an intermediate layer between the core/powder and the capsule membrane/shell (abstract).

Because example 2 of Ishimura et al. is prepared the same way as example 2 of the instant application, using the same steps with essentially the same amount of reactants (see page 12 paragraph labeled Preparation of hardener), although not explicitly recited, it is inherent that the weight ratio of the core and the capsule membrane formed is between 100:1 to 100:100. This is further evidenced because Ishimura et al. states that a shell has formed (page 13 lines 10-13 and Fig. 2).

Ishimura et al. does not disclose using any chlorine compounds and therefore there would be less than 400 ppm in the epoxy resin. This is further evidenced by example 2 of the reference being the same as example 2 of the instant application, using the same steps with essentially the same amount of reactants (see page 12 paragraph labeled Preparation of hardener), which would lead to the hardener made by Ishimura et al. and the curing agent made by the instant application having the same amount of chlorines.

If it is applicants' position that this would not be the case: (1) evidence would need to be presented to support applicants' position; and (2) it would be the Office's position that the application contains inadequate disclosure that there is no teaching as to how to obtain a composition with this property.

Regarding claims 2 and 3: While Ishimura et al. does not directly teach that the ^{13}C -NMR spectrum of the capsule membrane/shell ratio of a largest peak height between 37 to 47 ppm to a largest peak height between 47 to 57 ppm is not lower than 3 and not higher than 7, and the melt viscosity of the amine curing agent/hardener is not higher than 10 Pa·s at 160 °C, since all of the components are present in the composition it is inherent that the composition would have these properties. If it is applicants' position that this would not be the case: (1) evidence would need to be presented to support applicants' position; and (2) it would be the Office's position that the application contains inadequate disclosure that there is no teaching as to how to obtain a composition with these properties.

Regarding claim 5: Since the amine hardener in Example 2 of Ishimura et al. is made in the same way, i.e. using the same steps with essentially the same amount of reactants as the instant application's example 2, it would be inherent that the curing agent/hardener would have not more than 400 ppm chlorines.

Regarding claim 6: Reference example 1 of Ishimura et al. teaches reacting an epoxy resin with an amine compound to obtain the core/powder amine compound.

Regarding claim 9: A masterbatch is disclosed (abstract) comprising 100 parts by weight of the curing agent/hardener and 10-50,000 parts by weight epoxy resin (page 3 lines 24-25).

Regarding claim 10: 0.1 to 100 parts by weight of the masterbatch can be used to 100 parts by weight of an epoxy resin (page 9 lines 19-20).

Regarding claim 11: The composition can be mixed with other curing agents such as acid anhydrides (pg. 9 lines 24-39). Example 13 has 100 parts by weight epoxy, 90 parts by weight acid anhydride and 10 parts by weight masterbatch (pg. 18), which overlaps the claimed ranges.

Regarding claims 12, 16, and 20: Ishimura et al. teaches using the compositions for IC chip sealing, which uses anisotropic conductive materials (pg. 10 lines 21-31).

Regarding claims 13, 17, and 21: Ishimura et al. teaches using the compositions for the bonding of printed circuit boards, which uses conductive adhesive materials (pg. 10 lines 21-31).

Regarding claims 14, 18, and 22: Ishimura et al. teaches using the compositions for bonding headlight devices, which uses insulating adhesive material (pg. 10 lines 21-31).

Regarding claims 15, 19, and 23: Ishimura et al. teaches using the compositions for impregnating/encapsulating motor coils (pg. 10 lines 21-31).

Double Patenting

The provisional obvious type double patenting rejections over claims 4, 5 and 7 of copending Application No. 10/574981 and claims 1, 5 and 8 of copending Application No. 10/594,594 are withdrawn in view of the amended claims.

Response to Arguments

Applicant's arguments filed October 25, 2007 have been fully considered but they are not persuasive because:

Although claim 1 has been amended to include subject matter previously presented in dependent claims, the teachings of the Ishimura et al. document anticipates all limitations as set forth above.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Megan Arnberg whose telephone number is (571) 270-3292. The examiner can normally be reached on Monday - Friday 7:30-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on (571) 272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Megan Arnberg M(A)
January 7, 2008


MARK EASHOO, PH.D.
SUPERVISORY PATENT EXAMINER
22/Jan/08